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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,795	08/26/2003	Walter H. Delphin	081904/0305735	2065
20583	7550	04/21/2008	EXAMINER	
JONES DAY			YOON, TAE H	
222 EAST 41ST ST			ART UNIT	
NEW YORK, NY 10017			PAPER NUMBER	
			1796	
			MAIL DATE	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/647,795

**Applicant(s)**

DELPHIN ET AL.

**Examiner**

Tae H. Yoon

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-8 and 20-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-8 and 20-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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Broadened claims outside the two year statutory period under 35 U.S.C. 251

Claims 40 and 3-8 are rejected under 35 USC 251 as being broadened in a reissue application filed outside the two year statutory period.

Cancellation of a phrase (a comonomer that copolymerizes with methyl methacrylate) recited in the examined and original claim 1 broadens scope of claim 40 since said claim 1 would require presence of methyl methacrylate within a matrix of polymethylmethacrylate (PMMA) as evidenced by the disclosure throughout specification and method claims and by the cancelled phrase, but said claim 40 does not require copolymerization of said methyl methacrylate with the recited comonomer.

New matter rejection under 35 U.S.C. 251

Claims 40 and 3-8 are rejected under 35 USC 251 since broadening of subject matter is considered new matter.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 39 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an article obtained from a composition comprising pigments, does not reasonably provide enablement for the composition recited in claim 29. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope

with these claims. Use of the composition recited in claim 29 (PMMA, a comonomer and crosslinker (and may be methyl methacrylate)) would not yield an article with a granite appearance since pigments are needed in order to have such granite appearance as evidenced by the instant examples. Thermoforming only requires heating in order to change shape.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-8 and 29-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 40 recites a comonomer and said comonomer would require another monomer. But, no monomer is recited in claim and said comonomer could be crosslinked with polymethylmethacrylate in particles (b) with a crosslinker. Thus it is confusing and indefinite.

Claim 29 recites "a comonomer comprising an ethylenically unsaturated monomer that copolymerizes with methyl methacrylate", but claim does not recite any presence of said methyl methacrylate. Thus, it is confusing and indefinite since it is unclear whether said methyl methacrylate is present or can be added later on (scope of claim is unclear),

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-8 and 39 are rejected under 35 U.S.C. 103(a) as obvious over Kishida et al (JP 59-38253A).

Claims 3-8 and 20-40 are rejected under 35 U.S.C. 103(a) as obvious over Kishida et al (JP 59-38253A) in view of Buser et al (US 4,159,301).

Both of above rejections are maintained for reason of record with following response.

Applicant's response and 1.132 declaration have been considered, but found unpersuasive as following reasons;

1. Swell ratios with time in Fig. 1 are not claimed limitation, and the limitation found in specification does not limit scope of claims. 8% comonomer with 40 minutes show a swell ratio of about 2.5 and 12% comonomer with 40 minutes show a swell ratio of about 3.1-3.2. However, such swell ratio would be expected since a higher amount of a comonomer would have yielded a faster swelling. Another words, it would take a less time to obtain the same swell ratio with respect to a composition having a lower amount of a comonomer. Furthermore, it would be expected to take less than 40 minutes in order to obtain said swell ratio of about 3.1-3.2 for a composition with 30% comonomer, for example.

The art of record, Kishida et al (JP 59-38253A), also teaches swell ratio of 3-25 at page 2 of English translation, and thus modification (such as the asserted swell ratio

even though it is not claimed limitation) of said JP is a *prima facie* obviousness since JP teaches the swell ratio of the instant Fig. 1.

2. For swell ratio of about 4, 12% comonomer takes about 70 minutes and 8% comonomer takes about 130 minutes and one can obtain the same swelling ratio for different amounts of comonomers given different times, but again, such time is not claimed limitation.

Applicant's asserted properties (such as a faster curing time, extent of swelling and swelling time thereof, desired granite appearance (subjective expression) and thermoforming temperature) in PP 7 of the declaration are not claimed limitation, and thus said assertion has little probative value.

3. Even if said Fig. 1 and declaration had some probative value, the scope of claims is broader than the showing with respect to particular comonomer(s) and crosslinker used therein.

4. The mandatory components used in JP are same as in the instant invention, and thus an article would have the same structure. Applicant called said article having a granite appearance, and the article of JP would have a granite appearance. Thus, it would meet the instant claim 39.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tae H Yoon  
Primary Examiner  
Art Unit 1796

THY/April 16, 2008

/Tae H Yoon/